

MD-11 Boeing Converted Freighter

COMMERCIAL
AVIATION
SERVICES

The preferred package freighter



MD-11BCF conversion overview

Install Main Deck Pallet-Handling and
Smoke-Detector Systems

Replace Passenger Interior and
Systems with Freighter Interior

Install Main Deck
Cargo Door

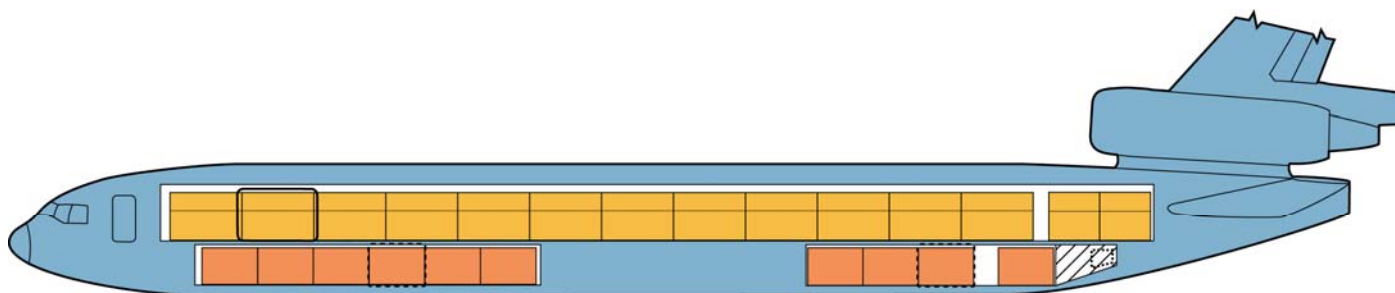


Install Cargo Barrier
Net and Fittings

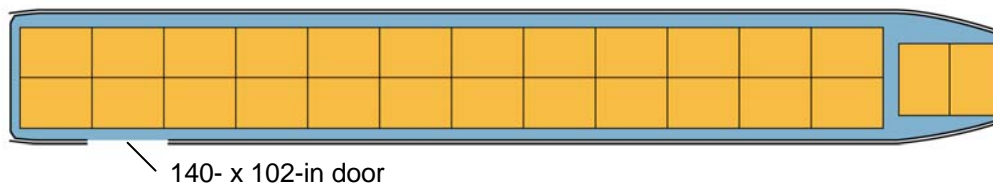
Modify Air-Conditioning
System for Freighter

Modify Main Deck Floor as Required

MD-11BCF cargo arrangements



Main Deck

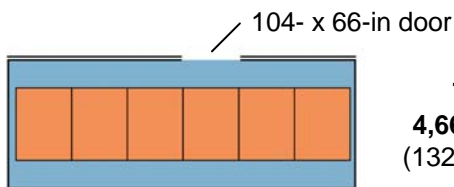


Main deck ULD loading configuration

Qty	ULD type	Volume
26	88- x 125-in pallets 3 load profiles	14,560 cu. ft. (412.3 cu. m.)
26	96- x 125-in pallets 5 load profiles	15,718 cu. ft. (445.1 cu. m.)

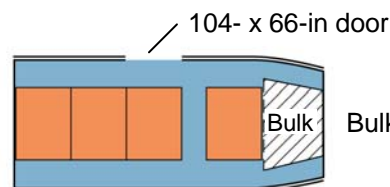
Lower Hold

(6) 96- x 125-in @ 415 = 2,490 cu. ft.



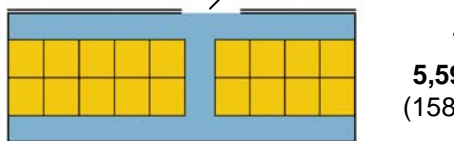
Total
4,660 cu. ft.
(132.0 cu. m.)

(4) 96- x 125-in @ 415 = 1,660 cu. ft.



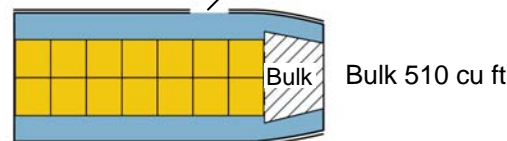
Bulk 510 cu. ft.

(18) LD-3 @ 159 = 2,862 cu. ft.



Total
5,598 cu. ft.
(158.5 cu. m.)

(14) LD-3 @ 159 = 2,226 cu. ft.



Bulk 510 cu ft

MD-11BCF main deck cargo flexibility

Large pallet capability



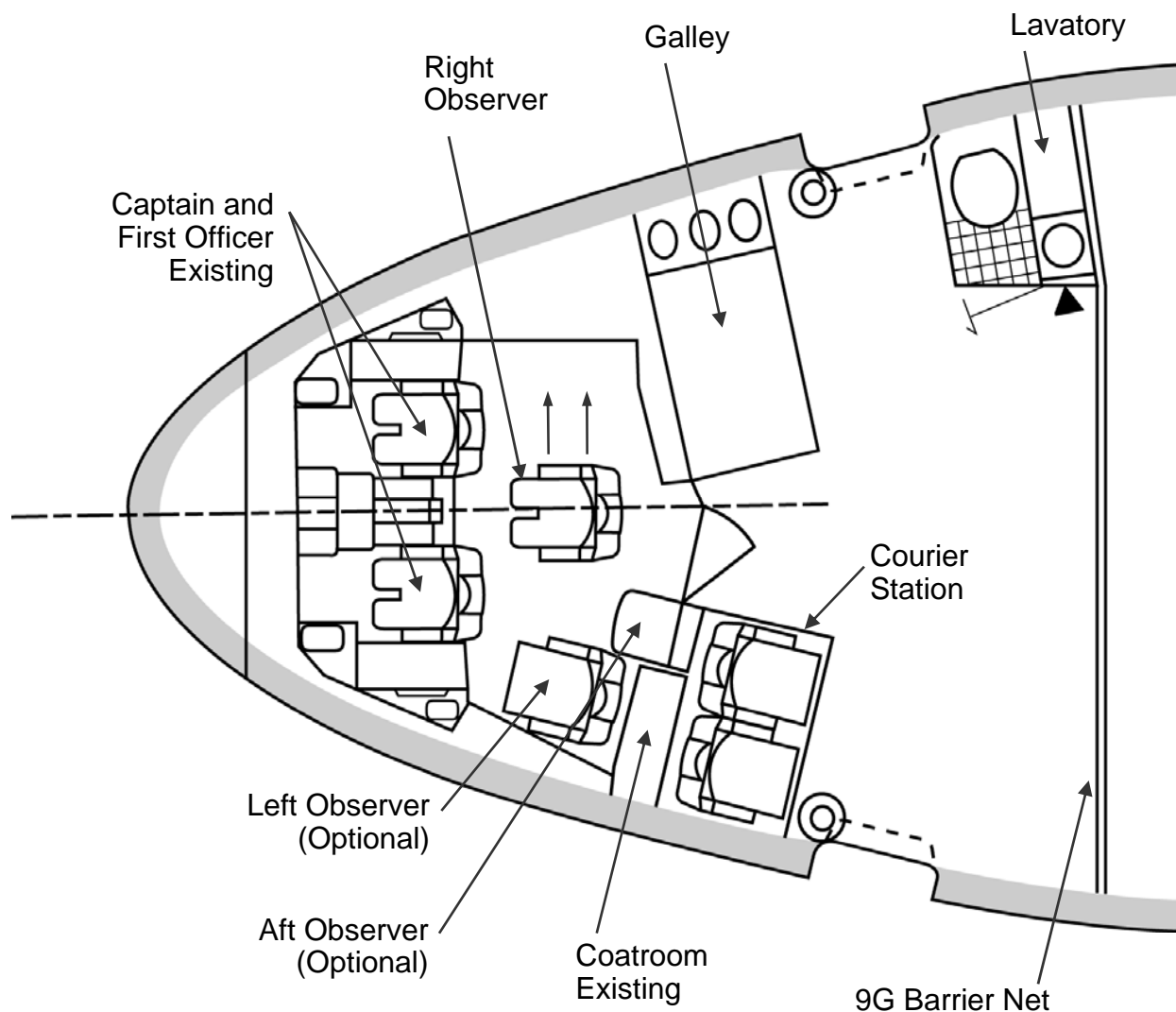
- (3) 96- x 238.5-in pallets
- (20) 88- or 96- x 125-in pallets
Capacity with 96- x 125-in pallets (5 load profiles)



- (4) 96- x 196-in pallets
- (19) 88- or 96- x 125-in pallets
Capacity with 96- x 125-in pallets (5 load profiles)

MD-11BCF crew area

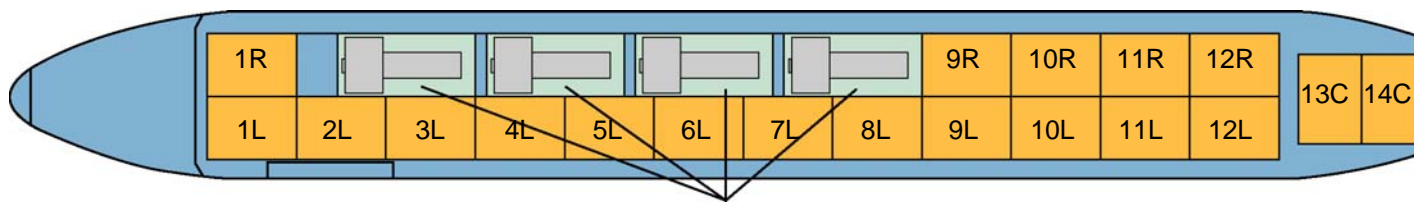
Standard front end configuration



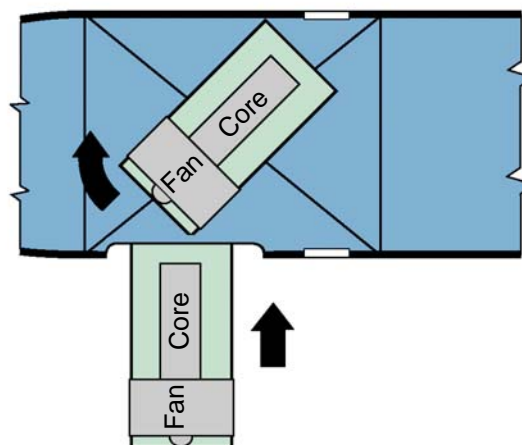
MD-11BCF Main deck engine transport



MD-11BCF Main deck engine transport



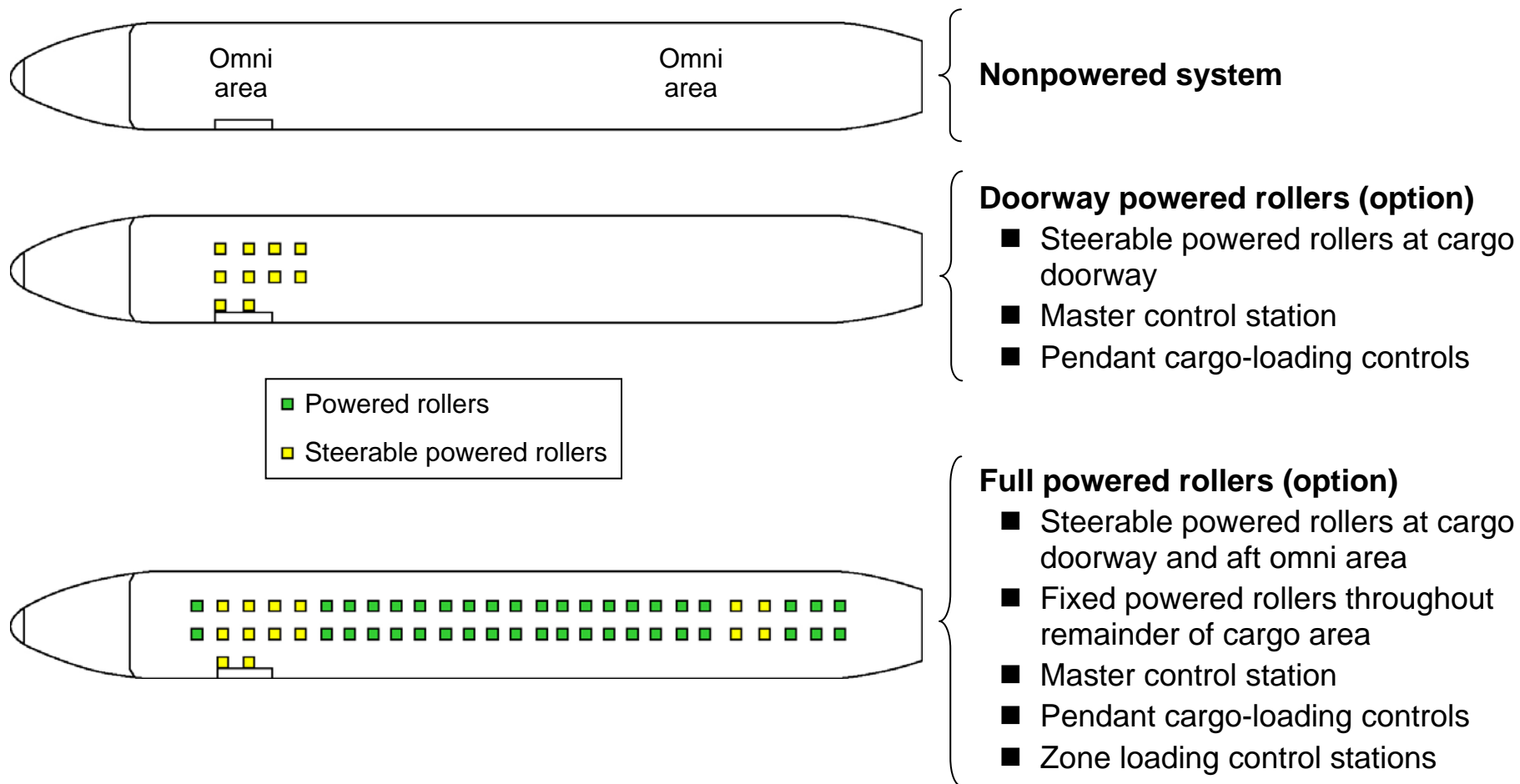
Loadable locations for engine transport device with MD-11, 767, or 747 engines



Loading techniques

MD-11BCF Main deck cargo management

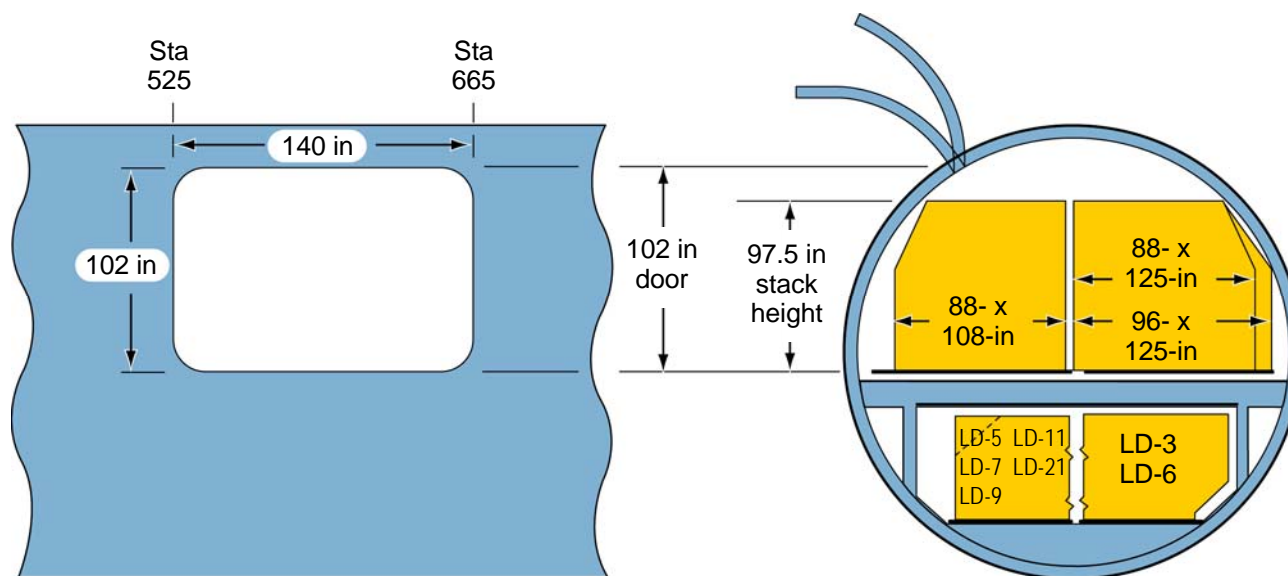
MD-11F and MD-11BCF



MD-11F and MD-11BCF main deck



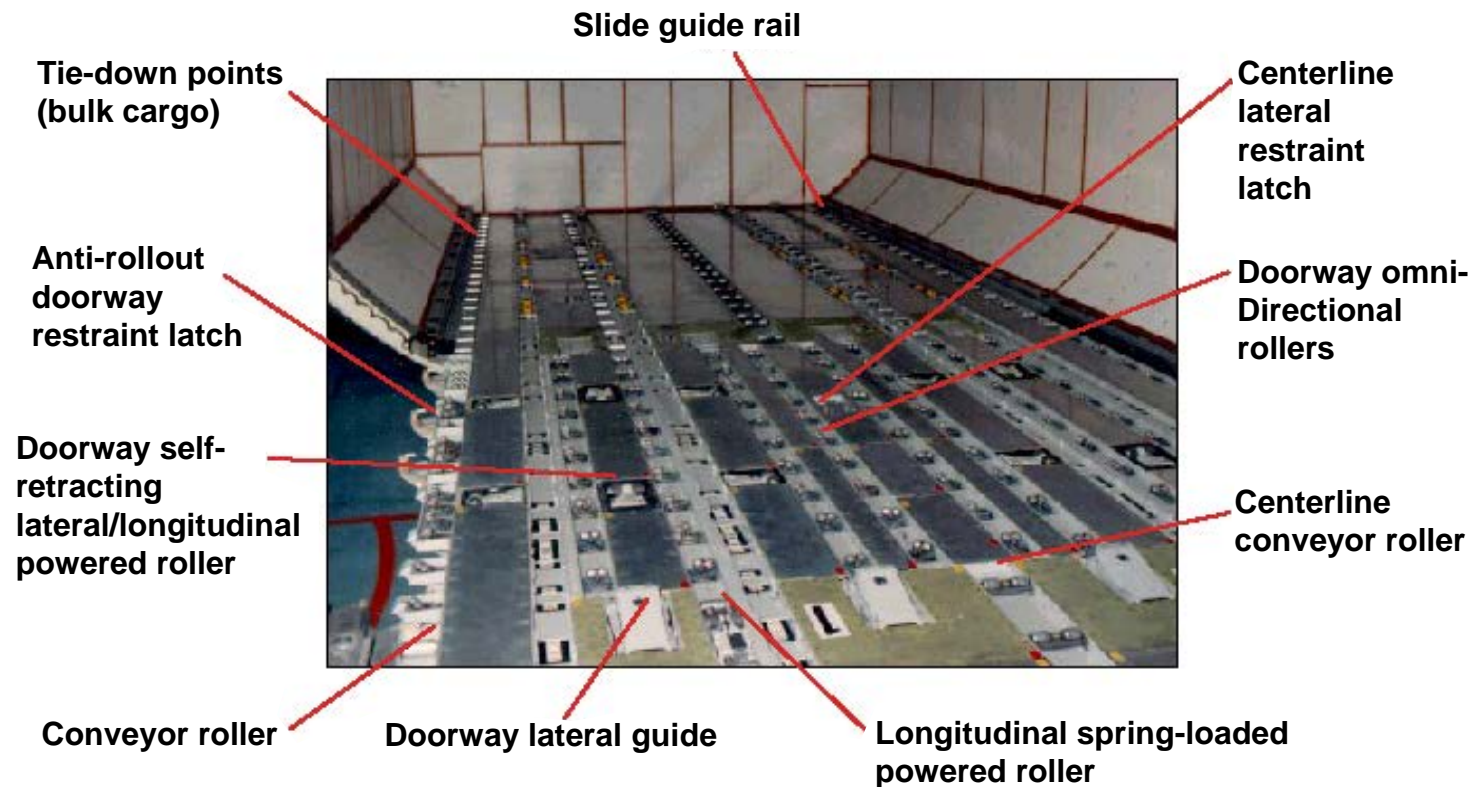
MD-11BCF Main deck cargo door



- Normal cargo door operation employs an independent hydraulic system with pressure supplied by an electrically driven pump.
- If electrical power is not available, the cargo door can be operated with a manual hydraulic pump.

MD-11BCF Fwd lower cargo compartment

Powered roller system



MD-11BCF Fwd lower cargo compartment

Powered roller system

Cargo compartment



**Cargo door/handling system
control panel**



MD-11BCF performance summary

General Electric Engines

		MD-11BCF CF6-80C2D		MD-11BCF CF6-80C2D Option	
Maximum Taxi Weight	kg (lb)	287,124	(633,000)	287,124	(633,000)
Maximum Takeoff Weight	kg (lb)	285,990	(630,500)	285,990	(630,500)
Maximum Landing Weight	kg (lb)	213,869	(471,500)	222,941	(491,500)
Maximum Zero Fuel Weight	kg (lb)	204,706	(451,300)	209,242	(461,300)
Estimated OEW (including tare)	kg (lb)	120,928	(266,600)	120,928	(266,600)
Tare	kg (lb)	4,853	(10,700)	4,853	(10,700)
Fuel Capacity	L (U.S.gal)	146,174	(38,615)	146,174	(38,615)
Revenue Payload	kg (lb)	83,779	(184,700)	88,314	(194,700)
Design Range	nmi (km)	3,971	(7,354)	3,483	(6,451)
Total Volume	m³ (ft³)	577.0	(20,378)	577.0	(20,378)
Density	kg/m³ (lb/ft³)	145.2	(9.1)	153.0	(9.6)
Main Deck Volume (Pallets)	m³ (ft³)	445.1	(15,718)	445.1	(15,718)
96x125 x96	Quantity		24		24
96x125 x84	Quantity		2		2
Lower Deck Volume	m³ (ft³)	117.5	(4,150)	117.5	(4,150)
96x125	Quantity		10		10
LD-3	Quantity		0		0
Bulk	m³ (ft³)	14.4	(510)	14.4	(510)

- Typical mission rules
- Nominal fuel burn + 4%

MD-11BCF performance summary

Pratt and Whitney Engines

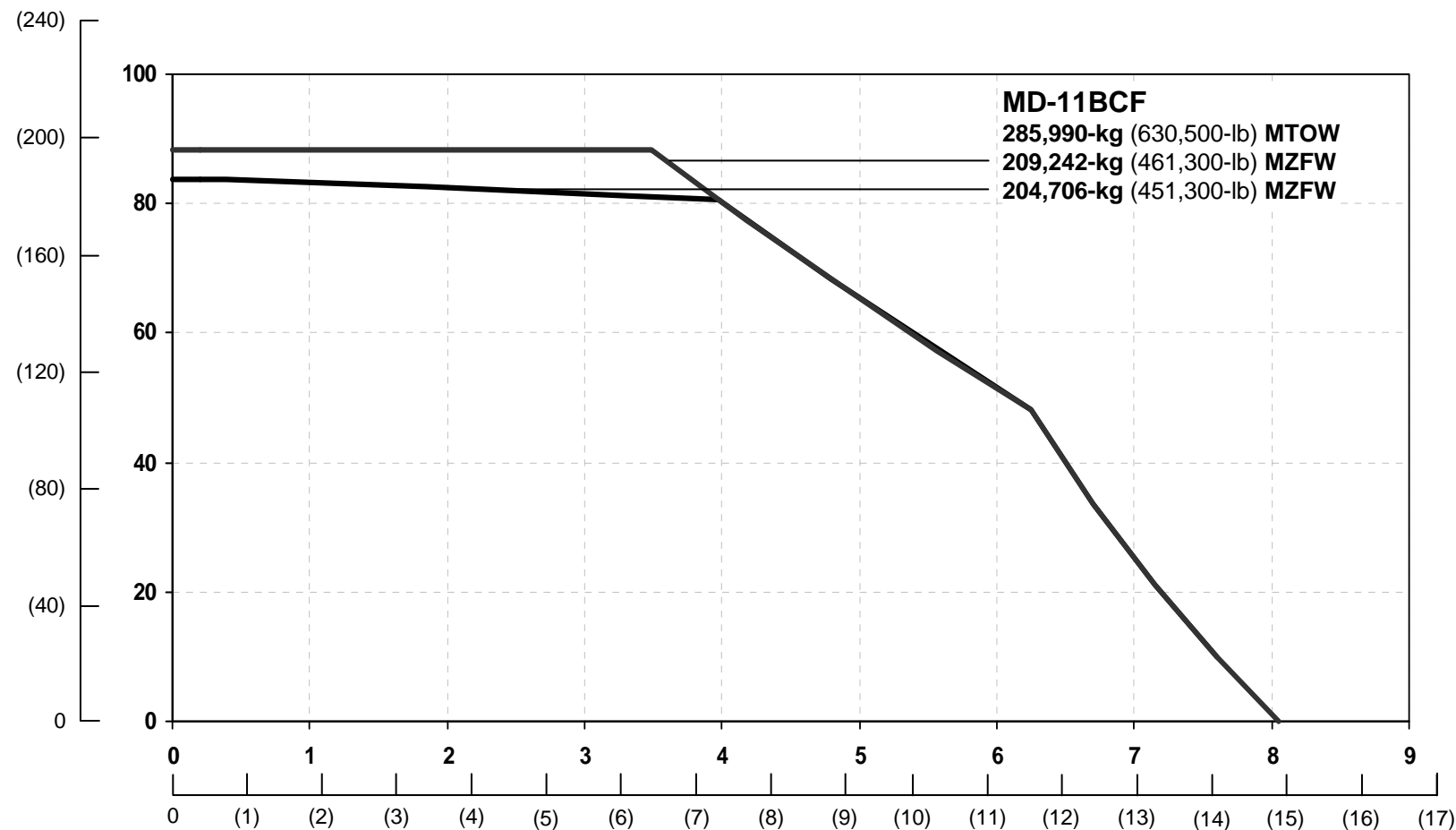
		MD-11BCF PW4462		MD-11BCF PW4462 Option	
Maximum Taxi Weight	kg (lb)	287,124	(633,000)	287,124	(633,000)
Maximum Takeoff Weight	kg (lb)	285,990	(630,500)	285,990	(630,500)
Maximum Landing Weight	kg (lb)	213,869	(471,500)	222,941	(491,500)
Maximum Zero Fuel Weight	kg (lb)	204,706	(451,300)	209,242	(461,300)
Estimated OEW (including tare)	kg (lb)	120,784	(266,284)	120,784	(266,284)
Tare	kg (lb)	4,853	(10,700)	4,853	(10,700)
Fuel Capacity	L (U.S. gal)	146,174	(38,615)	146,174	(38,615)
Revenue Payload	kg (lb)	83,922	(185,016)	88,458	(195,016)
Design Range	nmi (km)	3,927	(7,272)	3,412	(6,320)
Total Volume	m ³ (ft ³)	576.5	(20,358)	576.5	(20,358)
Density	kg/m ³ (lb/ft ³)	145.6	(9.1)	153.4	(9.6)
Main Deck Volume (Pallets)	m ³ (ft ³)	445.1	(15,718)	445.1	(15,718)
96x125 x96	Quantity		24		24
96x125 x84	Quantity		2		2
Lower Deck Volume	m ³ (ft ³)	117.5	(4,150)	117.5	(4,150)
96x125	Quantity		10		10
LD-3	Quantity		0		0
Bulk	m ³ (ft ³)	13.9	(490)	13.9	(490)

- Typical mission rules
- Nominal fuel burn + 4%

MD-11BCF payload-range capability

General Electric Engines

Revenue Payload, 1,000 kg (1,000 lb)



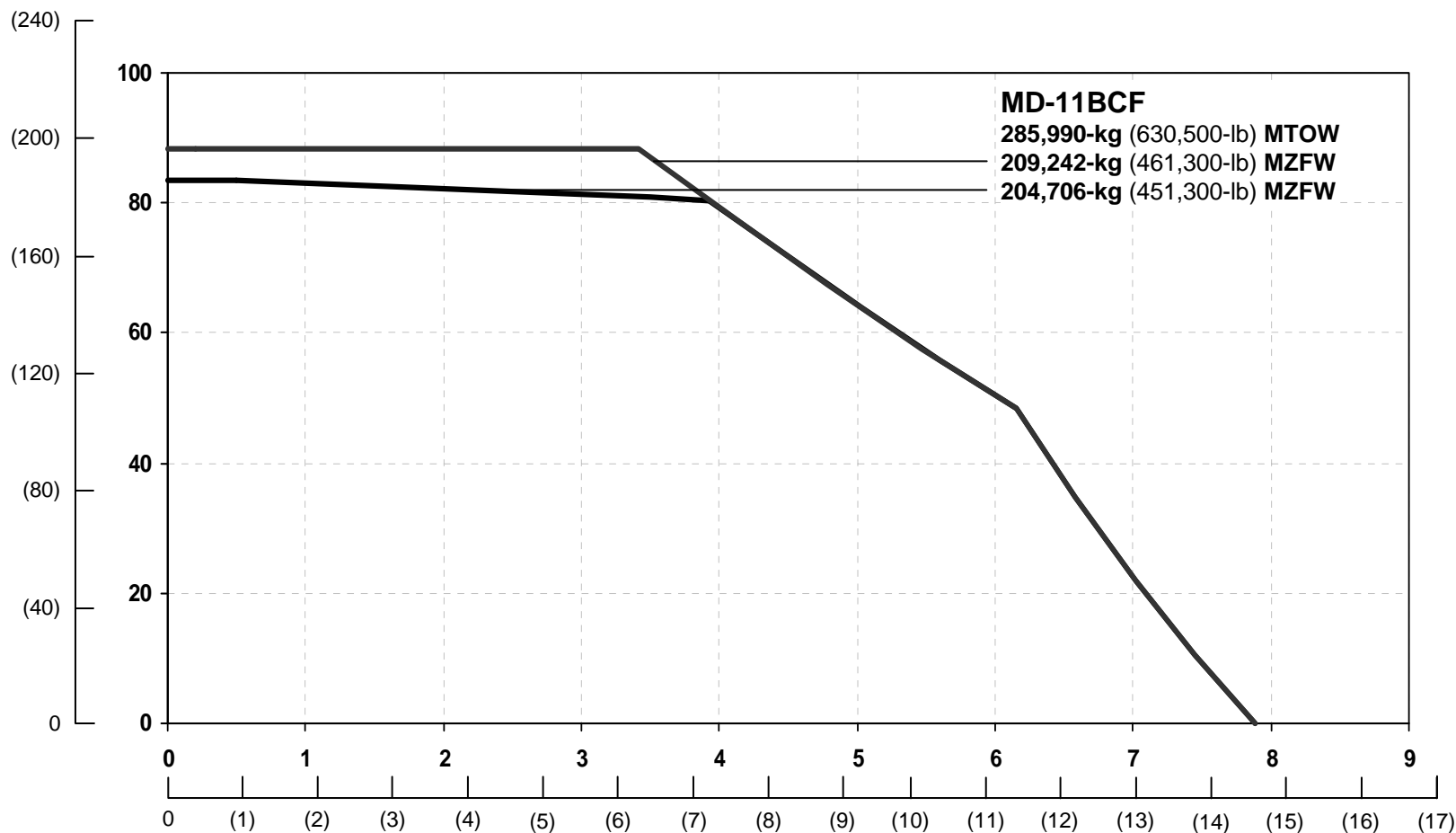
- Typical mission rules
- 200 nmi alternate

Range, 1,000 nmi (1,000 km)

MD-11BCF payload-range capability

Pratt and Whitney Engines

Revenue Payload, 1,000 kg (1,000 lb)



- Typical mission rules
- 200 nmi alternate

Range, 1,000 nmi (1,000 km)

Range capability from Anchorage

Revenue Payload

MD-11BCF

285,990-kg (630,500-lb) MTOW
83,779-kg (184,700-lb) payload

MD-11BCF Option

285,990-kg (630,500-lb) MTOW
84,314-kg (194,700-lb) payload

- GE engines
- Typical mission rules
- 85% annual winds
- Nominal fuel burn + 4%



Range capability from Los Angeles

Revenue Payload

MD-11BCF

285,990-kg (630,500-lb) MTOW
83,779-kg (184,700-lb) payload

MD-11BCF Option

285,990-kg (630,500-lb) MTOW
84,314-kg (194,700-lb) payload



- GE engines
- Typical mission rules
- 85% annual winds
- Nominal fuel burn + 4%

Range capability from Tokyo

Revenue Payload

MD-11BCF

285,990-kg (630,500-lb) MTOW
83,779-kg (184,700-lb) payload

MD-11BCF Option

285,990-kg (630,500-lb) MTOW
84,314-kg (194,700-lb) payload

- GE engines
- Typical mission rules
- 85% annual winds
- Nominal fuel burn + 4%



Range capability from Hong Kong

Revenue Payload

MD-11BCF

285,990-kg (630,500-lb) MTOW
83,779-kg (184,700-lb) payload

MD-11BCF Option

285,990-kg (630,500-lb) MTOW
84,314-kg (194,700-lb) payload

- GE engines
- Typical mission rules
- 85% annual winds
- Nominal fuel burn + 4%



Range capability from Frankfurt

Revenue Payload

MD-11BCF

285,990-kg (630,500-lb) MTOW
83,779-kg (184,700-lb) payload

MD-11BCF Option

285,990-kg (630,500-lb) MTOW
84,314-kg (194,700-lb) payload



- GE engines
- Typical mission rules
- 85% annual winds
- Nominal fuel burn + 4%

MD-11 Flight Deck

StartupBoeing

